

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the reference character 6 as used on page 6 of the specification is not found in the drawings. Further, the "brake backing plate" of page 5 of the drawings is not found.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "double-angle contact bearing" of claim 12 must be shown or the feature(s) canceled from the claim(s).

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The disclosure is objected to because of the following informalities:

The references to claims 15 and 16 on pages 1 and 4 must be deleted.

It is not clear what is meant by the "velomobile" as described on page 2.

The specification lacks the required headings for the Brief Description of the Drawings and the Detailed Description of the Invention.

The reference character 18 is used for two different elements on page 6.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1 it is not clear what the coupling element is exchangeable with.

In claim 3 the term "via" renders the claim indefinite as it does not describe any positive or structural relationship between the wheel and the shaft.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Ash (U.S. Patent 1664765).

Ash discloses a wheel assembly comprising a hollow central body or hub 7, a coupling element 2, 21, and a shaft 1, 22 to which the coupling element and the wheel are mounted. The coupling element is exchangeable depending on whether or not the shaft is driven.

The coupling element may include bearings and is considered to be an insert in the wheel hub.

With respect to claim 6, not the splined connection between the coupling element 21 or 27, and the shaft 22 or 34, as shown in figures 2 and 3.

With respect to claim 8 the brake is not shown, but would inherently be present in the brake drum when the wheel assembly was mounted to a vehicle.

With respect to claim 14, the manner in which the wheel is made is given no patentable weight in the product claim.

Claims 1-5, 7-11, and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Wagonhorst (U.S. Patent 1679453).

Wagonhorst discloses a wheel assembly comprising a hollow central body, a coupling element 10, 13, for mounting to an axle shaft (not shown). The coupling element is exchangeable depending on whether or not the axle shaft is driven.

The coupling element may include bearings and is considered to be an insert in the wheel hub.

With respect to claim 8 the brake is not shown, but would inherently be present in the brake drum when the wheel assembly was mounted to a vehicle.

With respect to claim 14, the manner in which the wheel is made is given no patentable weight in the product claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ash.

Ash does not specify the type of bearings used in the wheel of figure 3. However, to choose a certain type of bearings, such as double angle contact bearings would have been obvious because those of ordinary skill in the art could readily determine suitable bearings for the wheel assembly. Further, the type of bearings chosen would yield predictable results.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Holl is cited to show another wheel assembly which may be driven or not driven.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell D. Stormer whose telephone number is (571) 272-6687. The examiner can normally be reached on Monday through Friday, 9 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Russell D. Stormer/
Primary Examiner, Art Unit 3617